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 Forecast Consoles, Inc.

IN THE UNITED STATES DISTRICT COURT
 FOR THE SOUTHERN DISTRICT OF NEW YORK

FORECAST CONSOLES, INC.,)	ECF CASE
)	
)	
Plaintiff,)	
)	CIVIL ACTION NO.
)	07-CV-3106(KMW)(KNF)
v.)	
)	
)	
TBC CONSOLES, INC., TIME BASE)	
CORPORATION and JERRY HAHN,)	
)	
Defendants.)	

**PLAINTIFF’S STATEMENT OF UNDISPUTED FACTS PURSUANT
 TO LOCAL RULE 56.1 AS TO PLAINTIFF’S MOTION FOR SUMMARY
 JUDGMENT OF INFRINGEMENT OF U.S. PATENT NO. 7,125,088**

Pursuant to the March 5, 2008 Order of this Court, Plaintiff, Forecast Consoles, Inc.

(“Forecast” or “Plaintiff”), submits this Statement of Undisputed Facts Under Fed. R. Civ. P. 56 and Local Rule 56.1.

UNCONTROVERTED FACTS	SUPPORTING EVIDENCE
Plaintiff Forecast Consoles, Inc. (“Forecast”) and Defendant TBC Consoles, Inc. (“TBC”) are both engaged in the manufacture and sale of technical furniture, namely consoles and workstations for the TV production, post production and broadcast facilities.	<i>See Exhibit A.</i>

U.S. Patent No. 7,125,088 (“the ‘088 patent”) was issued by the United States Patent and Trademark Office on October 24, 2006 and is assigned to Forecast.	<i>See Exhibit B, Pg.1.</i>
The ‘088 patent discloses and claims a multi-media workstation having a master rail system for permitting horizontal adjustment of the various components of the workstation.	<i>See Exhibit B, Pg. 1 (Abstract).</i>
Count I of the complaint alleges infringement of the ‘088 patent based on TBC’s manufacture, sale and promotion of its “IntelliTrac” line of modular workstations.	<i>See Complaint, Count I.</i>
Independent claim 9 of the ‘088 patent recites the following elements: A multi-media workstation comprising: at least two vertical frames having an upper mounting surface thereon; a rail extrusion mounted to said mounting surface of said vertical frames and connecting said frames, said rail extrusion having as upper surface, a lateral surface and a longitudinal slot formed in each of said upper surface and said lateral surface; a desktop unit having a finger engaged in said longitudinal slot of said lateral surface of said rail extrusion, wherein said desktop unit is able to be horizontally translated along a length of said rail extrusion; and a vertical support stand for supporting a piece of audiovisual equipment, said vertical support stand having a finger engaged in said longitudinal slot of said upper surface of said rail extrusion, wherein said support stand is able to be horizontally translated along a length of said rail extrusion.	<i>See Exhibit B, col. 10.</i>
TBC has made, used, sold and/or offered for sale a line of modular furniture under the name “Intellitrac”.	<i>See Exhibit C.</i>
TBC’s Intellitrac products are multi-media workstations.	<i>See Exhibit C.</i>

TBC's Intellitrac products have at least two vertical frames having an upper mounting surface thereon.	<i>See Exhibit D, Pg. 1 (Stanchion-Type Base Structure). See also Exhibit E.</i>
TBC's Intellitrac products have a rail extrusion mounted to said mounting surface of said vertical frames and connecting said frames, said rail extrusion having an upper surface, a lateral surface and a longitudinal slot formed in each of said upper surface and said lateral surface.	<i>See Exhibit D, Pg. 1 (Front Trac; Main Structural T-Slot Extrusion). See also Exhibit E.</i>
TBC's Intellitrac products have a desktop unit having a finger engaged in said longitudinal slot of said lateral surface of said rail extrusion, wherein said desktop unit is able to be horizontally translated along a length of said rail extrusion.	<i>See Exhibit D, Pg. 1 (C-Top Arms Trac Mounted for Optimal Lateral Placement). See also Exhibit E.</i>
TBC's Intellitrac products have a vertical support stand for supporting a piece of audiovisual equipment, said vertical support stand having a finger engaged in said longitudinal slot of said upper surface of said rail extrusion, wherein said support stand is able to be horizontally translated along a length of said rail extrusion.	<i>See Exhibit D, Pg. 1 (Front Trac; Main Structural T-Slot Extrusion for LCD Posts, Countertop Arms & Accessories); Pg. 3 (FP-M7, T-PHONE, T-LITE-18). See also Exhibit E.</i>
Claim 10 of the '088 patent depends upon claim 9 and further recites "wherein said rail extrusion further includes an inclined surface disposed at a downward angle with respect to said upper surface, said inclined surface having a longitudinal slot formed therein."	<i>See Exhibit B, col. 10.</i>
In TBC's Intellitrac products, said rail extrusion further includes an inclined surface disposed at a downward angle with respect to said upper surface, said inclined surface having a longitudinal slot formed therein."	<i>See Exhibit D, Pg. 1 (Front Trac; Main Structural T-Slot Extrusion). See also Exhibit E.</i>

Claim 12 of the '088 patent depends upon claim 9 and recites that "wherein said desktop unit comprises a work surface and at least two desktop brackets for supporting said work surface, said desktop brackets each including a finger engaged in said longitudinal slot of said lateral surface of said rail extrusion."	<i>See Exhibit B, col. 10.</i>
In TBC's Intellitrac products, said desktop unit comprises a work surface and at least two desktop brackets for supporting said work surface, said desktop brackets each including a finger engaged in said longitudinal slot of said lateral surface of said rail extrusion.	<i>See Exhibit D, Pg. 1 (C-Top Arms Trac Mounted for Optimal Lateral Placement). See also Exhibit E.</i>
Claim 13 of the '088 patent depends upon claim 9 and recites "wherein said vertical support stand is adapted to support a flat screen monitor."	<i>See Exhibit B, col. 10.</i>
In TBC's Intellitrac products, said vertical support stand is adapted to support a flat screen monitor.	<i>See Exhibit D, Pg. 1 (Front Trac; Main Structural T-Slot Extrusion for LCD Posts); Pg. 3 (FP-M7). See also Exhibit E.</i>

Dated: March 19, 2008

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EXHIBIT A



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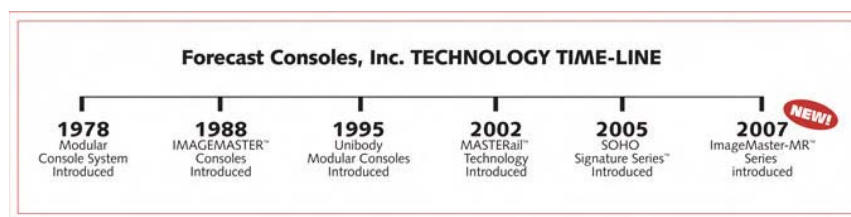
PRICE QUOTE

About Forecast

Since 1978, Forecast Consoles has produced technical furniture and consoles for broadcast control rooms, edit rooms, edit workstations, call centers, and dispatch.

Technical furniture is our only business, and through years of listening, testing, evaluating and perfecting, Forecast's designers and engineers have attained the highest level of knowledge, skill and experience. Our designs consider the demands of the "New Workplace", with a focus on ergonomics and aesthetics. Our value engineering provides the initial functionality required, while skillfully incorporating the dynamic capabilities necessary to adapt for a new-future purpose.

The proven success of Forecast Consoles lies in the ability to anticipate the advances in multimedia technology and quickly develop creative solutions to accommodate these new toolsets. The ability to turn customers' work environment problems into creative and functional work solutions has held Forecast Consoles as the industry leader in technical furniture for over three decades.



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About TBC

TBC CONSOLES' primary business is the design and manufacture of video production consoles and equipment cabinetry. We presently maintain offices and shop space in Edgewood, N.Y. Our total shop/office space is 18,000 sq. ft. and we employ 35 full time workers. Included in this number are 8 full time draftsmen. Our shop facilities are engineered to the needs of video console production with our personnel; tools and machinery all geared towards this specific effort.

We typically work directly with end users of our products: TV production, Post Production and Broadcast facilities. While the majority of our clients are from the local metropolitan area, we have a strong and growing national and international client base.

TBC partners *Jerry Hahn* and *Frank Lapallo* have been designing and building video production consoles for two decades. We incorporated in April 1988 and have been growing at a steady pace. (15-20% annually) while there is considerable overlap in tasks, Frank's main focus is the direction of Engineering, shop production, and installations. Jerry manages design, sales and marketing.

As we grow as a company, we steadfastly maintain our relationship with our on-going and loyal clients. This also means servicing and modifying our consoles on a regular basis. Worn parts need refurbishing and repair, and the ever-changing technology of this industry assures that there is always some new piece of equipment to install. We have this on-going association with clients, which include Broadway Video, Betelgeuse Productions, Unitel Video and Manhattan Transfer, amongst many others. We regard it as crucial for us to keep pace with the rapid introduction of new equipment and technologies of random access (non-linear) editing, digital TV, high-definition TV, etc. Recently we are part of the strong influx of non-linear editing systems, which require inexpensive console solutions. This event has led TBC develop a more national and international presence of "shippable" consoles. We have also broadened our scope of work to include many of general telecommunications facilities. We have done a significant quantity of work for all major networks (*CBS, NBC, ABC*), satellite uplink centers (Group W, Viacom), corporate clients (Citibank, Dow Jones, American Express, Merrill Lynch) and the proliferation of new cable channels (*MSNBC, MTV, USA Networks, A&E, Fox News NY1 NEWS*).

Interestingly, as the technology becomes more sophisticated, are clients seem to want more sophisticated furniture designs. They are no longer satisfied with a "standard" 5 bay, 8 rack unit console, but want to also see the sleeker lines and well balanced proportions of what has become the trademark of TBC console furniture. Perhaps most importantly, our clients have learned to expect the great attention to detail we place on things like ergonomics of sightlines, acoustics, button reaches, lighting, and even keyboard and chair positioning.

At TBC we spend a lot of time on design, research and development. We are always looking for the optimal way to do something, with the best hardware and materials. Our design team works with state of the art tools like Autocad 2000, and maintains a vast reference library of industry equipment and specifications. Our shop utilizes such cost-effective equipment as our digitally controlled CNC router, and takes as much pride in the engineering and construction of our product---as the design team takes with the initial layout solution.

Our aim is to not only keep pace with the industry---but to stay ahead of it. We do this to maintain the reputation we have as a "World-Class" leader in console design and fabrication.

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EXHIBIT B

(12) **United States Patent**
Haberman

(10) **Patent No.:** **US 7,125,088 B2**
(45) **Date of Patent:** ***Oct. 24, 2006**

(54) **MULTI-MEDIA WORKSTATION HAVING A MASTER RAIL SYSTEM**

(75) Inventor: **William G. Haberman**, Glen Head, NY (US)

(73) Assignee: **Forecast Consoles, Inc.**, Deer Park, NY (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 164 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **11/083,758**

(22) Filed: **Mar. 18, 2005**

(65) **Prior Publication Data**

US 2005/0183353 A1 Aug. 25, 2005

Related U.S. Application Data

(60) Continuation of application No. 11/005,064, filed on Dec. 6, 2004, which is a division of application No. 10/407,436, filed on Apr. 4, 2003, now Pat. No. 6,857,712.

(60) Provisional application No. 60/370,070, filed on Apr. 4, 2002.

(51) **Int. Cl.**

A47B 47/00 (2006.01)

A47F 10/00 (2006.01)

(52) **U.S. Cl.** **312/223.3**; 108/50.01; 108/143; 108/102; 52/36.1; 52/36.4; 312/195

(58) **Field of Classification Search** 52/35.1, 52/36.4, 36.5; 312/223.3, 194, 195, 196, 312/265.4, 265.1; 108/50.01, 50.02, 137, 108/143, 102

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,382,642 A	5/1983	Burdick
4,836,625 A	6/1989	Catta
4,838,177 A	6/1989	Vander Park
4,852,500 A	8/1989	Ryburg et al.
4,974,913 A	12/1990	Vogt et al.
5,337,525 A	8/1994	Zaccai et al.
5,428,928 A	7/1995	Hellwig et al.
5,746,488 A	5/1998	LaCour
5,921,052 A	7/1999	Kemp
5,954,409 A	9/1999	LaCour
5,974,985 A	11/1999	Flototto et al.
6,042,203 A	3/2000	Bogucki
6,050,659 A	4/2000	LaCour
6,152,048 A	11/2000	Vander Park
6,189,268 B1	2/2001	Carr et al.
6,279,761 B1	8/2001	Niewiadomski et al.

(Continued)

OTHER PUBLICATIONS

"Series 200 Console System" product brochure pp. 4, 5, 7 and 8. Publication Date Unknown.

(Continued)

Primary Examiner—Carl D. Friedman

Assistant Examiner—Chi Q. Nguyen

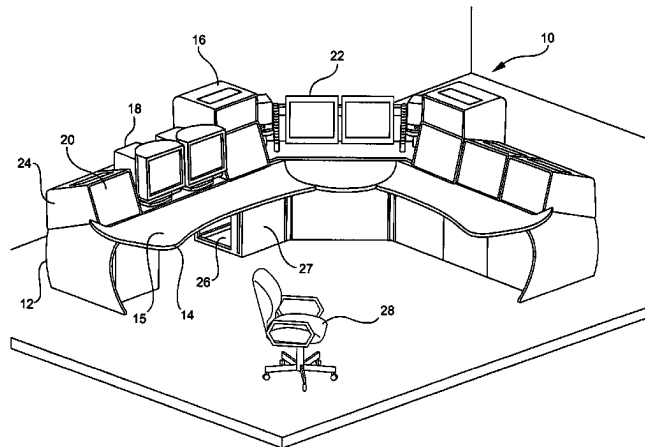
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(57)

ABSTRACT

A multi-media workstation having a master rail system for permitting horizontal adjustment of the various components of the workstation. The workstation generally includes a console having a work surface and a master rail system for supporting various audiovisual equipment. The master rail system includes a rail extrusion connecting at least two frames and having a longitudinal slot formed in at least one of its surfaces. The various components of the workstation each include a finger engaged in the longitudinal slot of the rail extrusion, wherein the component is able to be horizontally translated along a length of the rail extrusion.

13 Claims, 9 Drawing Sheets



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U.S. PATENT DOCUMENTS

6,283,043	B1	9/2001	Stern et al.	
6,302,035	B1	10/2001	Frenkler et al.	
D473,078	S	4/2003	Haberman	
6,619,765	B1	9/2003	Visser et al.	
6,857,712	B1 *	2/2005	Haberman 312/223.3
2003/0020381	A1	1/2003	Cattaneo	
2003/0071546	A1	4/2003	Gosling et al.	
2004/0035332	A1	2/2004	Lin	

OTHER PUBLICATIONS

TBC Consoles "NBC Olympics Master Worksheet," breaking date "Jan. 9, 2000".

TBC Consoles "Production Series PSO Modular System." Date Unknown.

"USA Networks—NOC Multi-Channel Room." Date Unknown.

TBC Consoles "GRAPHICS Console" bearing date "Mar. 28, 2001".

Untitled Photograph of desk supporting plasma monitors. Date Unknown.

TBC Consoles "Lockheed Martin Overseas—LCD Consoles", bearing date "Oct. 10, 2001".

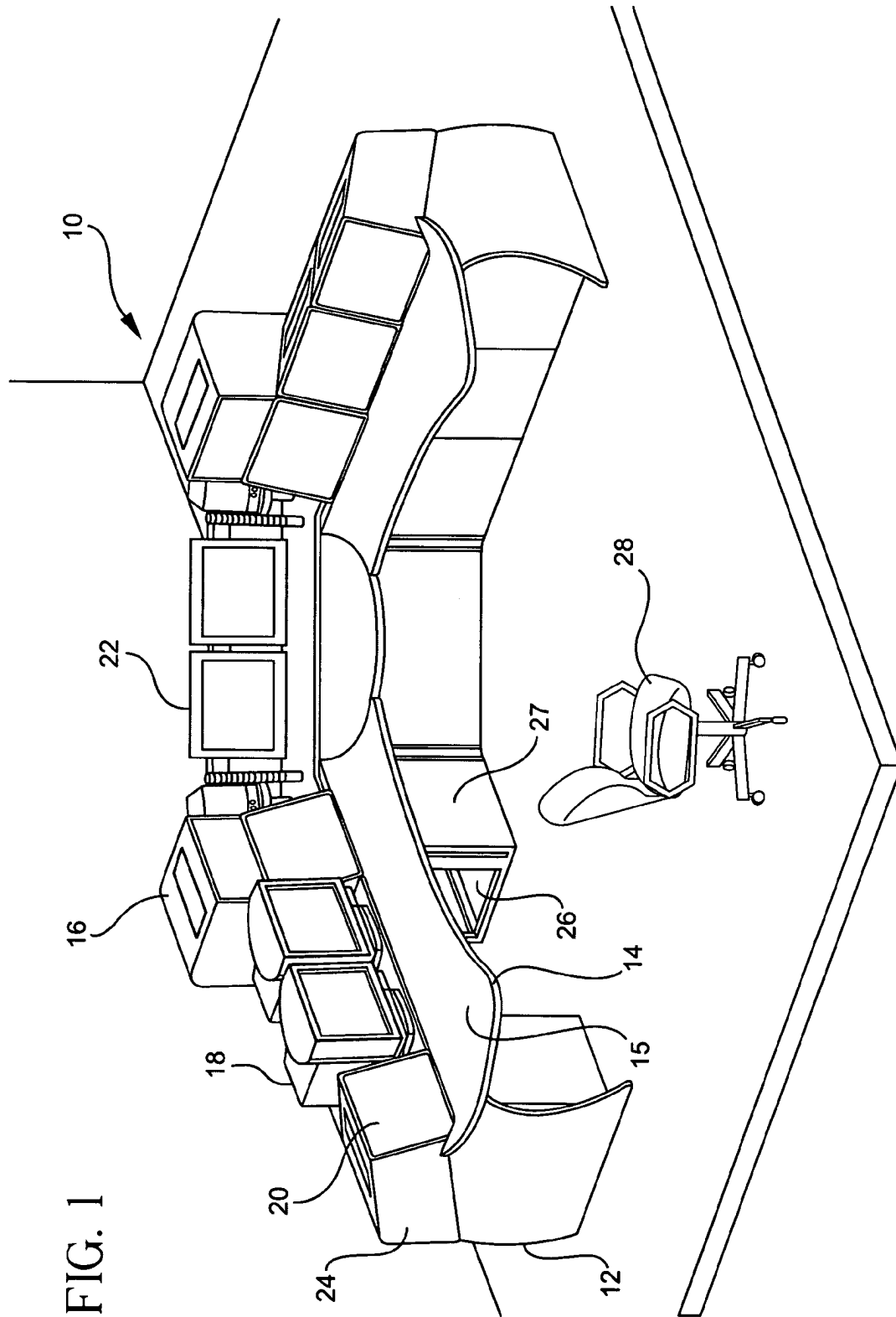
TBC Consoles "News 12 Connecticut—PS2-4" Shop Drawing, bearing date "Nov. 10, 2002".

Evans Consoles, Inc. brochure entitled "Series 200," publication date unknown.

Item MB Kit Systems, LTD. drawing entitled "Line 8 Light Black," dated Nov. 29, 2001.

Drawings entitled "MCC Sectional Elevation," publication date unknown.

* cited by examiner



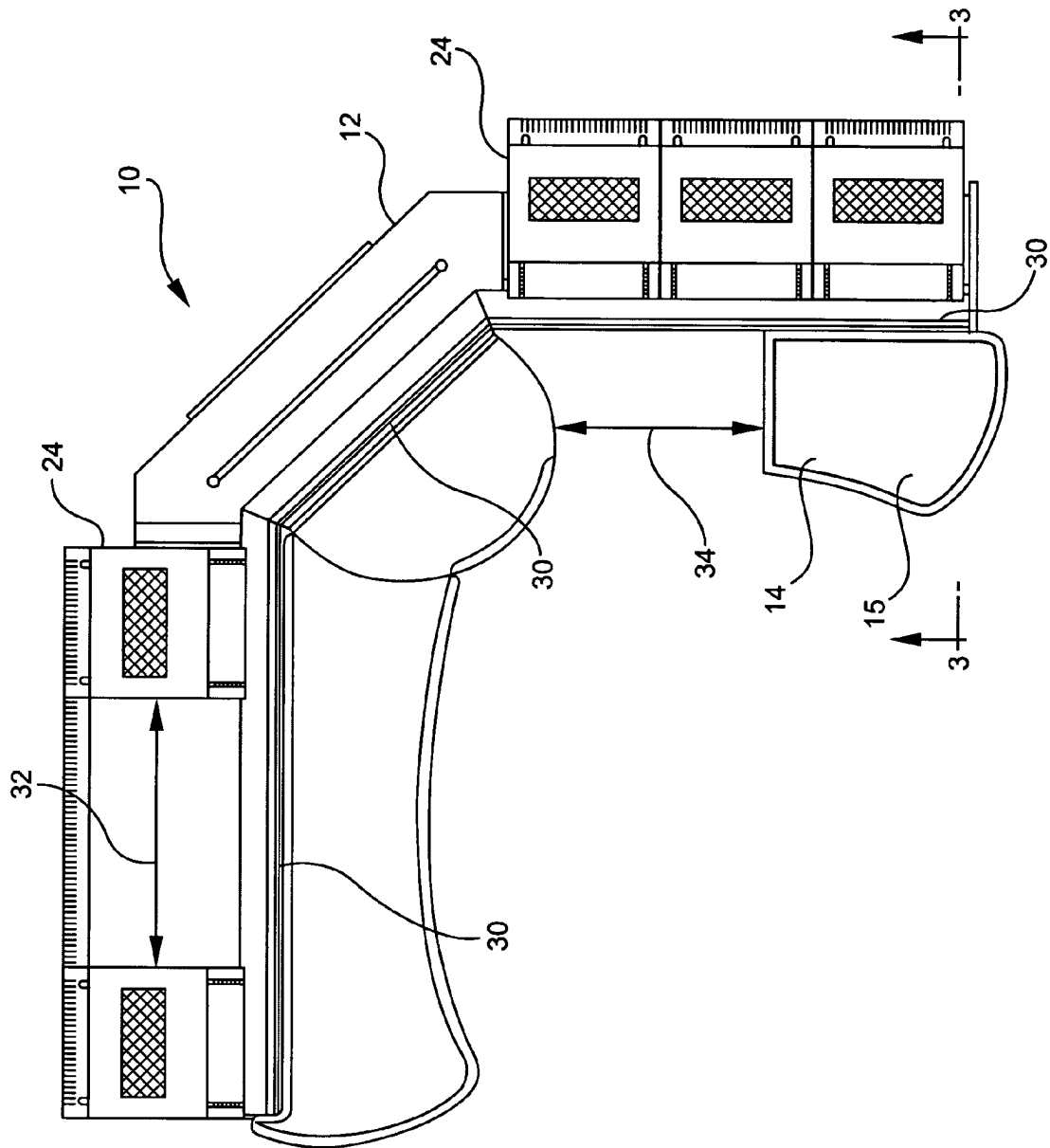
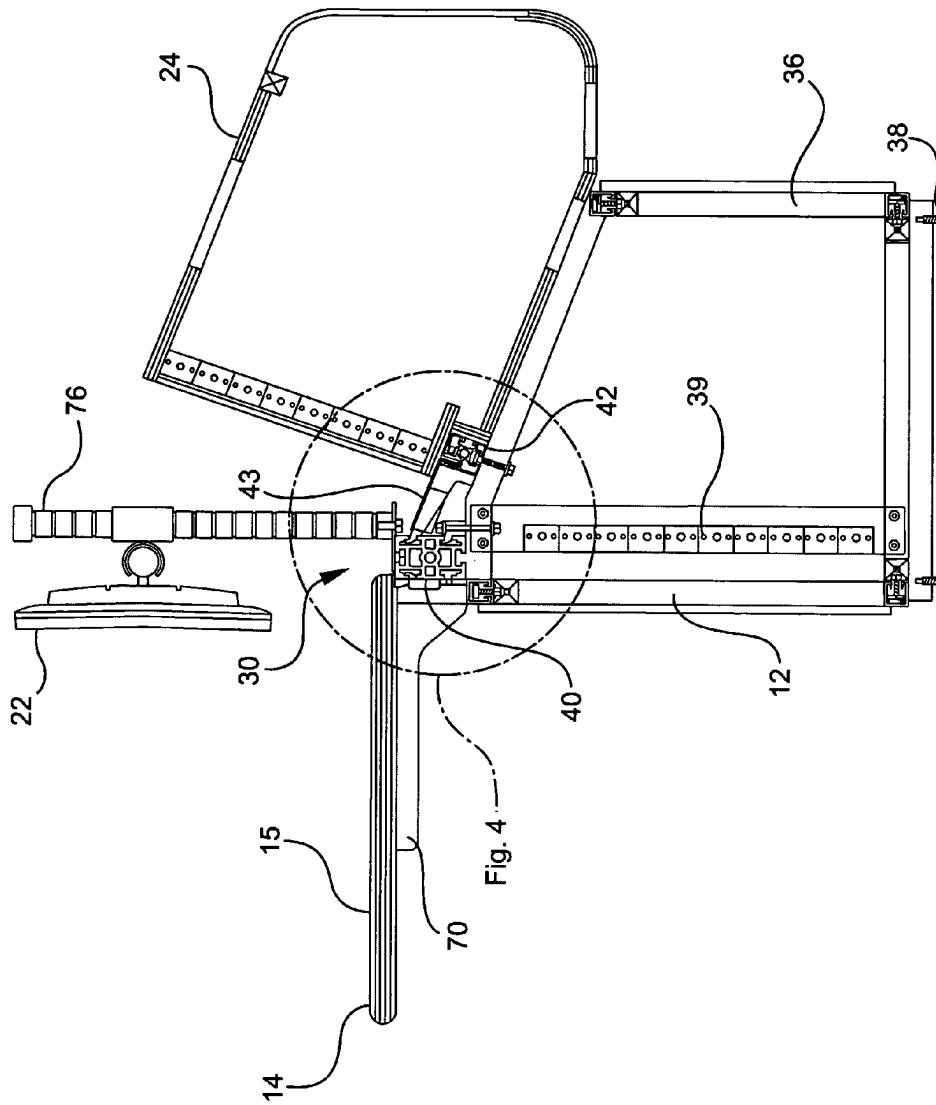


FIG. 2

FIG. 3



U.S. Patent

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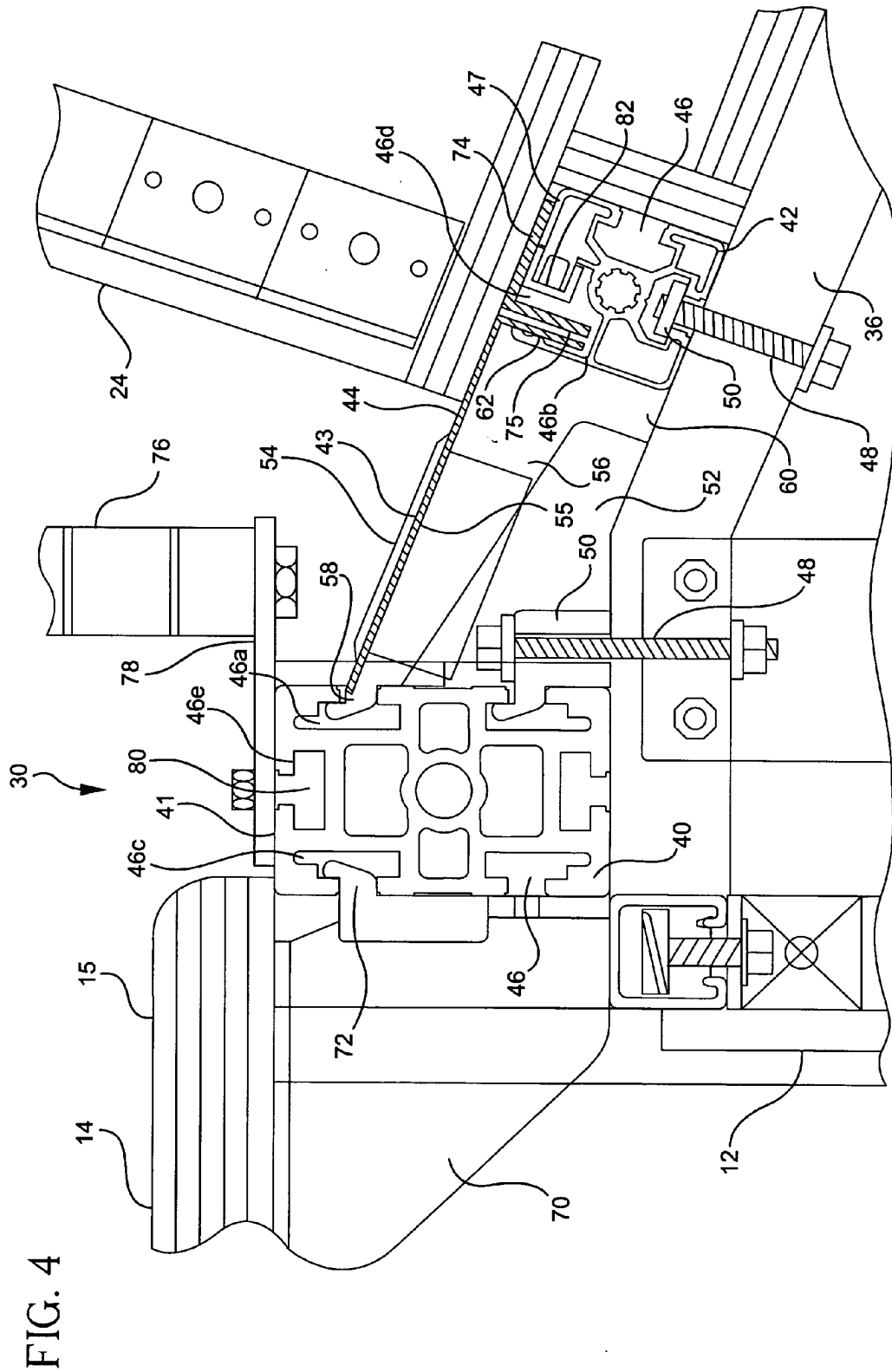
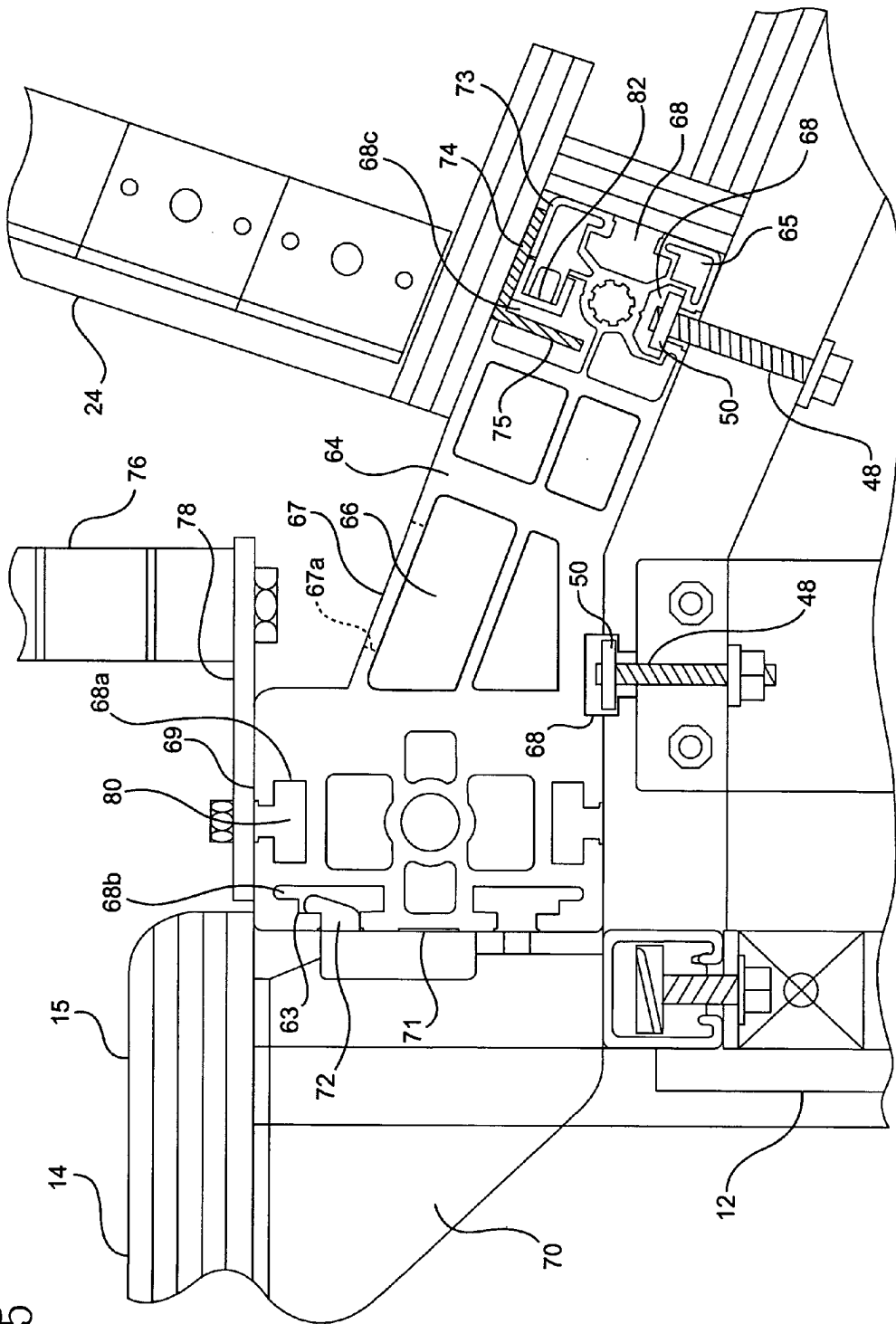


FIG. 5



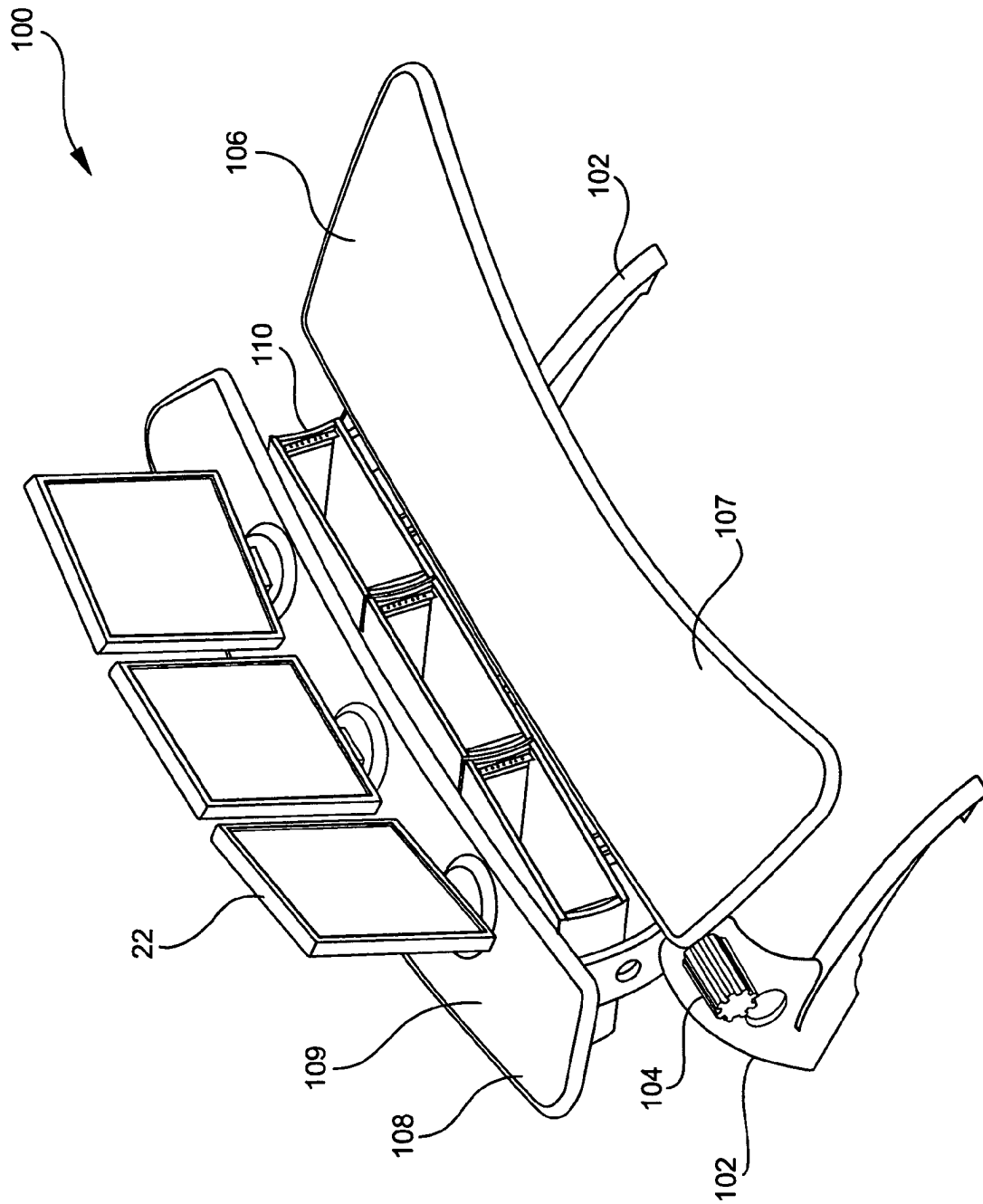
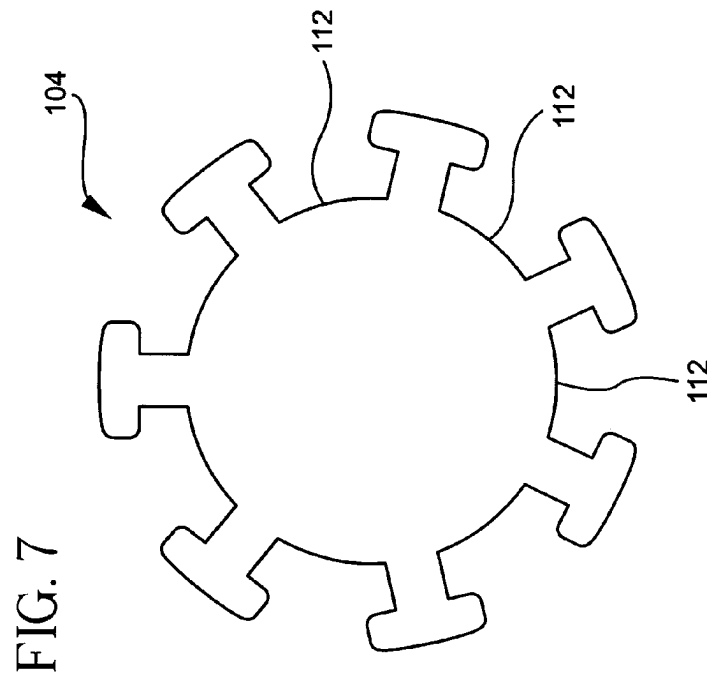
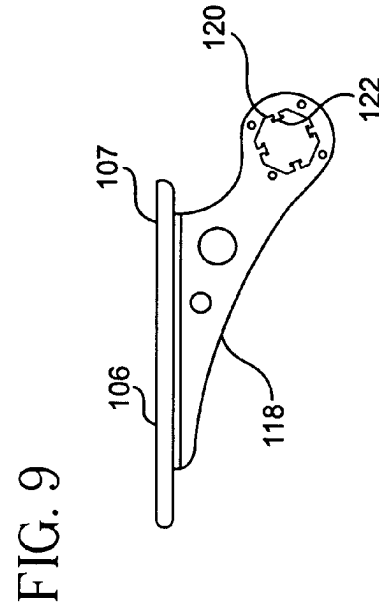
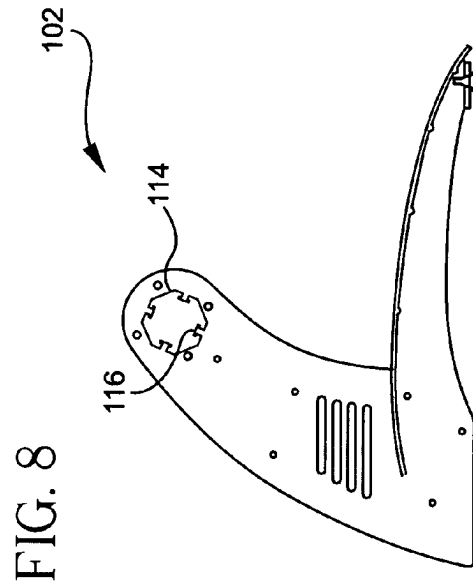


FIG. 6



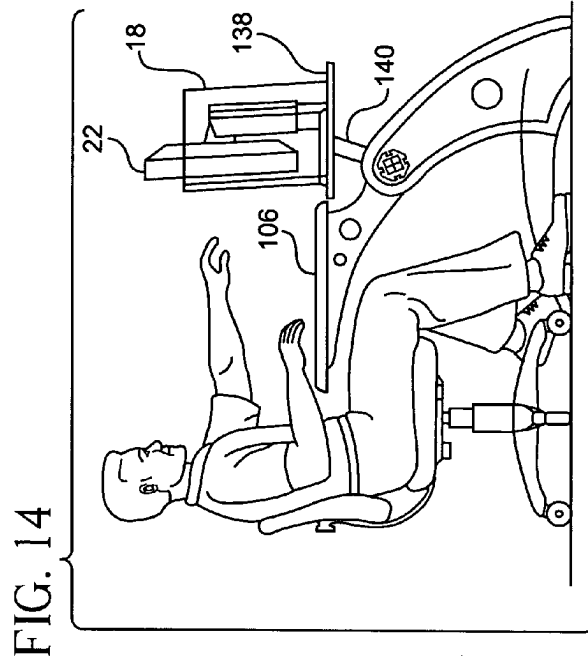
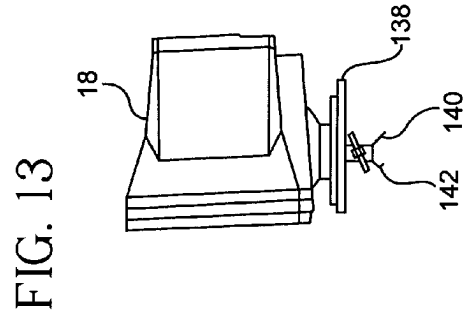
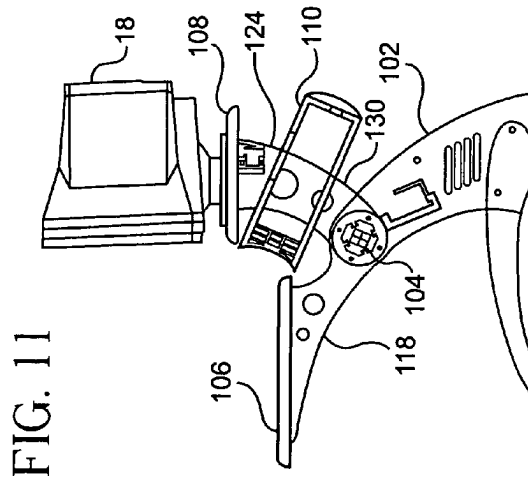
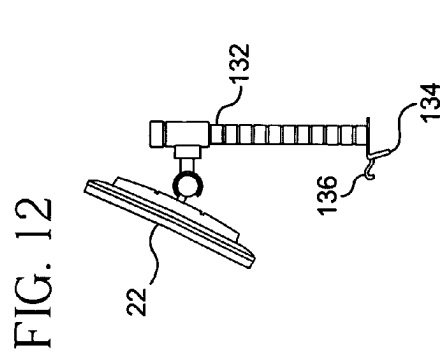
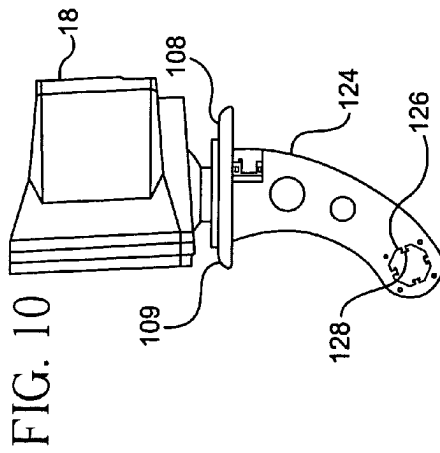


FIG. 15

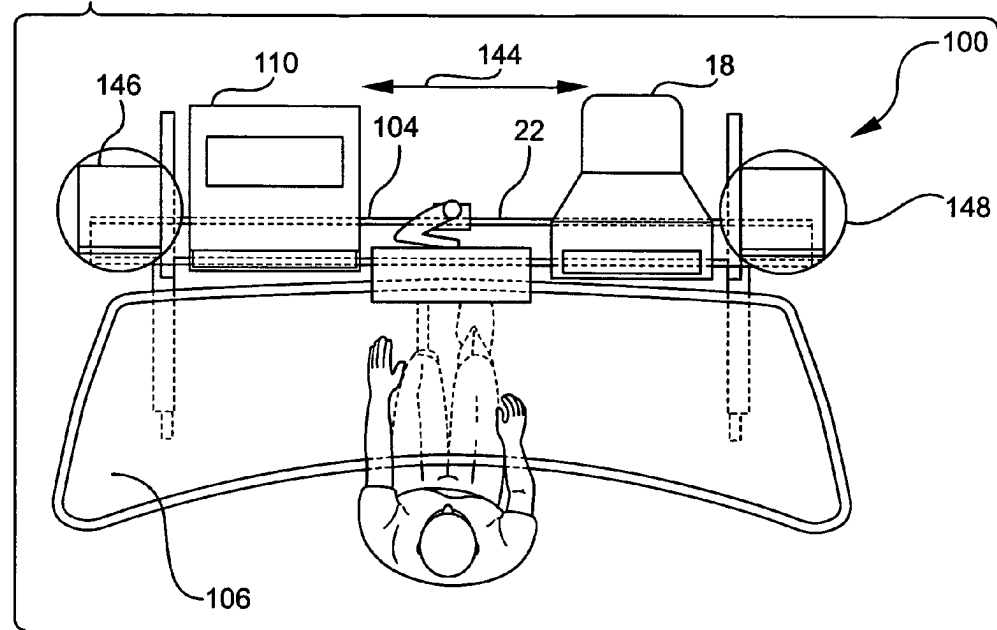
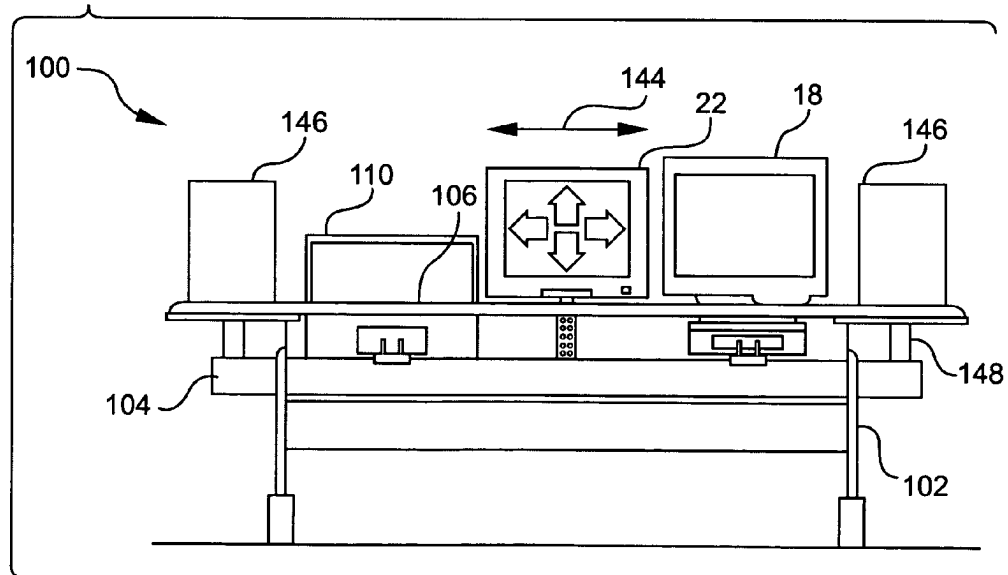


FIG. 16



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**MULTI-MEDIA WORKSTATION HAVING A
MASTER RAIL SYSTEM****CROSS-REFERENCE TO RELATED
APPLICATIONS**

This application is a continuation application of U.S. application Ser. No. 11/005,064, filed Dec. 6, 2004, which is a divisional application of U.S. application Ser. No. 10/407,436, filed Apr. 4, 2003, now U.S. Pat. No. 6,857,712, which claims the benefit of U.S. Provisional Application No. 60/370,070, filed on Apr. 4, 2002.

FIELD OF THE INVENTION

The present invention relates generally to multi-media workstations for supporting various electronic equipment, and more particularly to a modular workstation console having a master rail system that provides for full horizontal adjustment of the various components of the workstation.

BACKGROUND OF THE INVENTION

Workstations for mounting audio-visual, electrical, communication and computer equipment are well known and are available from different manufacturers. It is also known to construct office workstations in a modular fashion that permits a wide variety of furniture groupings or arrangements. However, if numerous electrical components are required together in a relatively small workstation space, it becomes essential to easily arrange such components in a compact manner whereby the equipment is comfortably and conveniently accessible to the user or users. Efficient routing of the electrical wiring and cables so as not to detract from the appearance of the workstation also becomes an issue. Wiring and cables should be located away from the floor areas where persons might trip on them and should be easily accessible for service personnel.

Some particular environments that require increasingly complicated and sophisticated workstations include television studios, radio stations, security centers, air traffic control centers and financial and brokerage institutions where users typically need access to numerous television monitors, computer displays, data processors and telecommunications equipment arranged in a side-by-side manner. In such environments, workstations are typically custom built and installed by the manufacturer based on the user's particular equipment requirements. As such, the workstation arrangement for supporting the various electronic components is usually permanently fixed. If it later becomes necessary to expand the workstation or rearrange the electronic components, the workstation must be rebuilt or replaced. The result is that the workstation may be put out of use during the modification or expansion. Thus, such known workstations are not optimally suited for use in a dynamic work environment, where workspaces are ideally capable of rapid configuration and reconfiguration by the workers themselves in a highly efficient manner.

Accordingly, it would be desirable to provide a flexible, modular workstation that permits the user to easily adjust the positions of the various components of the workstation as desired. Additionally, it would be desirable to provide such a workstation that is adapted to allow mounting of additional equipment or components and that can be easily connected to other workstations.

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SUMMARY OF THE INVENTION

The present invention is a multi-media workstation having a master rail system for permitting horizontal adjustment of the various components of the workstation. The workstation generally includes a console having a work surface and a master rail system for supporting various audiovisual equipment.

In a preferred embodiment, the multi-media workstation includes at least two vertical frames having an upper mounting surface thereon, a first rail extrusion mounted to the mounting surface of the vertical frames and connecting the frames, a second rail extrusion mounted to the mounting surface of the vertical frames and connecting the frames, a desktop unit mounted to the first rail extrusion and a console box, for supporting a piece of audiovisual equipment, mounted to the second rail extrusion. The first rail extrusion has an upper surface, a lateral surface and a longitudinal slot formed in at least one of the upper and lateral surfaces. The second rail extrusion has an upper surface and a longitudinal slot formed in the upper surface. The longitudinal slots are preferably T-shaped. The second rail extrusion is mounted to the mounting surface of the vertical frames such that the upper surface of the second rail extrusion is disposed at a downward angle with respect to the upper surface of the first rail extrusion. The desktop unit has a finger engaged in the longitudinal slot of the first rail extrusion, wherein the desktop unit is able to be horizontally translated along a length of the first rail extrusion. Similarly, the console box has a finger engaged in the longitudinal slot of the second rail extrusion, wherein the console box is able to be horizontally translated along a length of the second extrusion.

Preferably, the workstation further includes a bracket assembly connected between the first and second rail extrusions. The bracket assembly includes a flat panel extending between the first and second rail extrusions and at least one bracket for supporting the flat panel. The flat panel encloses a cavity between the first rail extrusion, the second rail extrusion and the vertical frames for containing electrical wiring for the workstation therein. Additionally, the flat panel includes at least one grommet opening for accessing the electrical wiring contained within the cavity.

The desktop unit preferably includes a work surface and at least two desktop brackets for supporting the work surface. The desktop brackets each include a finger engaged in the longitudinal slot of the first rail extrusion.

Furthermore, the first rail extrusion preferably includes a second longitudinal slot formed in one of the upper and lateral surfaces and the workstation further preferably includes a support stand for supporting a second piece of workstation equipment. The support stand has a finger engaged in the second longitudinal slot of the first rail extrusion, wherein the support stand is able to be horizontally translated along a length of the first rail extrusion.

Thus, the console includes a plurality of rigid steel frames, which are spaced at various intervals along the length of the console. The master rail system is integrated into the frames of the console for providing maximum horizontal adjustability of the various components of the workstation. The first and second rail extrusions can include a plurality of T-shaped slots formed therein along the entire length of the extrusion. The flat panel spoil board is essentially a flat plate connecting the first and second rail extrusions and extending along the length of the console. The spoil board encloses a cavity to contain electrical wiring for the various components of the workstation along the length of the console.

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In an alternative embodiment, the first rail extrusion, the second rail extrusion and the spoil board can be integrated into a single extrusion mounted to the top of the console. Thus, in this embodiment, the workstation generally includes at least two vertical frames having an upper mounting surface thereon, a rail extrusion mounted to the mounting surface of the vertical frames and connecting the frames, a desktop unit mounted to the rail extrusion and a console box, for supporting a piece of audiovisual equipment, mounted to the rail extrusion. The rail extrusion includes a first portion having an upper surface, a lateral surface and a longitudinal slot formed in at least one of the upper and lateral surfaces. The rail extrusion further includes a second portion having an upper surface and a longitudinal slot formed in the upper surface. Again, the longitudinal slots are preferably T-shaped. The upper surface of the second portion is formed at a downward angle with respect to the upper surface of the first portion. The desktop unit has a finger engaged in the longitudinal slot of the first portion of the rail extrusion, wherein the desktop unit is able to be horizontally translated along a length of the first portion of the rail extrusion. Similarly, the console has a finger engaged in the longitudinal slot of the second portion of the rail extrusion, wherein the console box is able to be horizontally translated along a length of the second portion of the rail extrusion.

Preferably, the rail extrusion further includes a web portion connecting the first and second portions. The web portion includes at least one longitudinal cavity formed therein, for containing electrical wiring for the workstation, and at least one grommet opening for accessing the electrical wiring contained within the cavity. Additionally, the single extrusion can be formed with a plurality of T-shaped slots extending the entire length of the single extrusion.

In another alternative embodiment, the multi-media workstation includes at least two vertical frames, wherein each frame has an aperture therethrough and at least one finger extending inwardly into the aperture. A rail extrusion is slidably received in the aperture of each of the vertical frames and connects the frames. The rail extrusion has a perimeter surface and at least one longitudinal slot formed in the perimeter surface. The slot engages the fingers of the vertical frames, wherein the vertical frames are able to be horizontally translated along a length of the rail extrusion. Similar to that described above, the workstation in this embodiment also includes a desktop unit having a finger engaged in the longitudinal slot of the rail extrusion, wherein the desktop unit is able to be horizontally translated along a length of the rail extrusion. The rail extrusion of this embodiment preferably has a circular cross-section and a plurality of longitudinal slots formed in around the perimeter surface at spaced locations.

Again, a console box unit can also be mounted to the rail extrusion. However, in this embodiment, the console box unit preferably includes a console box and a console box bracket. The console box bracket includes an aperture therethrough and at least one finger extending inwardly into the aperture. The aperture slidably receives the rail extrusion and the finger engages the longitudinal slot of the rail extrusion, wherein the console box unit is able to be horizontally translated along a length of the rail extrusion.

The desktop unit also preferably includes a worksurface and at least two desktop brackets fixed to a bottom surface thereof. Each of the desktop brackets includes an aperture therethrough and at least one finger extending inwardly into the aperture. The aperture slidably receives the rail extrusion and the finger engages the longitudinal slot of the rail extrusion.

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Additionally, the workstation may also include a shelf unit mounted to the rail extrusion, wherein the shelf unit is able to be horizontally translated along a length of the rail extrusion. The shelf unit preferably includes a flat surface and a shelf bracket fixed to a bottom surface thereof. The shelf bracket includes an aperture therethrough and at least one finger extending inwardly into the aperture. The aperture slidably receives the rail extrusion and the finger engages the longitudinal slot of the rail extrusion. The shelf unit is preferably spaced vertically higher than the desktop unit and the console box unit is positioned between the shelf unit and the desktop unit.

Thus, the workstation of this embodiment can include a master rail system consisting of an extruded rail having a circular cross-section and a plurality of T-slots formed along the length of the rail and angularly spaced around its circumference. In this manner, the electronic components and the work surface are mounted to the rail system and can be both horizontally and angularly adjusted to suit the user's needs. Additionally, the various components of the workstation can be interchanged and new components can be added to suit the user's needs.

In all embodiments of the present invention, the various electrical components of the workstation are mounted to the master rail system in such a manner that they can be horizontally adjusted to suit any need. Additionally, the work surface is also mounted to the master rail system and is also provided with horizontal adjustment. In particular, the electrical components and the work surface are provided with mounting provisions which are inserted within and engage the T-shaped slots of the master rail system. The mounting provisions permit horizontal translation of the components and the work surface along the entire length of the T-slot in the master rail system. As a result of the present invention, a totally adjustable and interchangeable workstation system is provided.

Other objects and features of the present invention will become apparent from the following detailed description considered in conjunction with the accompanying drawings. It is to be understood, however, that the drawings are designed as an illustration only and not as a definition of the limits of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a top perspective view of the multi-media workstation formed in accordance with the present invention.

FIG. 2 is a top plan view of the workstation shown in FIG. 1.

FIG. 3 is a side view of the workstation shown in FIG. 2 taken along line 3—3.

FIG. 4 is an expanded detailed view of the master rail system shown in FIG. 3 as indicated by the dotted line 4.

FIG. 5 is an expanded detailed view of an alternative embodiment of the master rail system shown in FIG. 4.

FIG. 6 is a top perspective view of an alternative embodiment of the multi-media workstation formed in accordance with the present invention.

FIG. 7 is a cross-sectional view of the extrusion shown in FIG. 6.

FIG. 8 is a side view of the work station leg shown in FIG. 6.

FIG. 9 is a side view of desktop bracket shown in FIG. 6.

FIG. 10 is a side view of the shelf bracket shown in FIG. 6.

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FIG. 11 is a side view of the assembled workstation shown in FIG. 6.

FIG. 12 is a side view of an additional support stand.

FIG. 13 is a side view of another additional support stand.

FIG. 14 is a side view of an alternative configuration of the workstation shown in FIG. 6.

FIG. 15 is a top plan view of the workstation shown in FIG. 6.

FIG. 16 is a front plan view of the workstation shown in FIG. 6.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIG. 1 shows a multi-media workstation 10 formed in accordance with the present invention. This type of workstation can typically be found at a control center for monitoring and controlling audiovisual equipment. Such workstations can be found, for example, in television studios, radio stations, security centers, air traffic control centers and financial and brokerage institutions.

The workstation 10 includes a console 12 having a desktop unit 14 including a flat work surface or desktop 15. The console 12 supports various audiovisual equipment such as computers 16, computer monitors 18, television monitors 20 and flat monitors 22. Television monitors 20 are typically mounted to and contained within standard-sized console boxes 24, which are also part of console 12. The supporting electronic hardware 26 can be stored within cabinets 27 provided below the desktop 14 of the console 12. One or more rolling chairs 28 are also typically provided to allow the operator(s) to monitor the equipment and to comfortably move from one piece of equipment to the other as required.

Referring now to FIGS. 2-4, the console 12 of the present invention includes a master rail system 30 integrated into the frame of the console for providing maximum horizontal adjustability of the various components of the workstation 10. In particular, the master rail system 30 allows for horizontal movement of the console boxes 24, as indicated by arrows 32, as well as horizontal movement of one or more desktops 14, as indicated by arrows 34. As will be discussed in further detail below, the master rail system 30 additionally includes provisions for mounting and horizontally adjusting the position of other secondary or auxiliary equipment between the desktop 14 and the console boxes 24.

Referring to FIGS. 3 and 4, which are cross-sectional and expanded cross-sectional views respectively of the workstation 10 of FIG. 2, the console 12 includes a plurality of rigid steel frames 36, which are spaced at various intervals along the length of the console 12. The frames 36 may be of a welded construction and may include feet 38 for resting on the floor. The frames 36 may be connected from one to the other with brackets 39 to add rigidity and strength to the console 12. Mounted at the tops of the frames 36 is the master rail system 30, which extends the full length of the console 12. The master rail system 30 includes a first rail extrusion 40, a second rail extrusion 42 and a bracket assembly 43 including a spoil board 44 connected between the first and second rail extrusions.

Referring now specifically to FIG. 4, the first and second rail extrusions 40 and 42 are made from a metallic material, such as aluminum, and include a plurality of T-shaped slots 46 formed therein along the entire length of the extrusion. Preferably, the first rail extrusion 40 is rectangular in shape having two T-slots 46 on each lateral side and having a T-slot on both its upper and lower faces. The second rail extrusion

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42 is preferably square in cross-section having a T-slot 46 formed on each side. The first and second rail extrusions 40 and 42 are mounted to the steel frames 36 by conventional bolts 48 having fittings 50 that engage one or more of the T-slots 46 of the rail extrusions.

The spoil board 44 is essentially a flat plate connecting the first and second rail extrusions 40 and 42 and extending along the length of the console 12. The spoil board 44 encloses a cavity 52 between the first rail extrusion 40, the second rail extrusion 42 and the steel frame 36 to contain electrical wiring for the various component of the workstation 10 along the length of the console 12. Standard wiring grommets 54 are provided at spaced openings in the spoil board 44 for routing wires from the cavity 52 to the various electrical components mounted to the console 12. The spoil board 44 is supported by a plurality of spoil board brackets 56 intermittently spaced along the length of the spoil board 54. The spoil board brackets 56 include a finger 58 which is sized to fit within and engage an upper side T-slot 46a of the first rail extrusion 40. The opposite end of the spoil board bracket 56 includes a leg 60 which rests on the steel frame 36 of the console 12 for supporting the spoil board 44. The spoil board 44 includes a bent edge 62 which fits within the upper T-slot 46b of the second rail extrusion 42. In this manner, the spoil board 44 is connected between the first and the second rail extrusions 40 and 42.

In an alternative embodiment, as shown in FIG. 5, the first rail extrusion 40, the second rail extrusion 42 and the spoil board 54 can be integrated into a single extrusion 64 mounted to the top of the console 12. The single extrusion 64 includes a first portion 63, similar to the first extrusion 40, a second portion 65, similar to the second extrusion 42, and a web portion 67, similar to the bracket assembly 43, connecting the first and second portions. Like the first and second rail extrusions 40 and 42 described above, the first and second portions 63 and 65 of the single extrusion 64 are formed with a plurality of T-shaped slots 68 extending the entire length of the single extrusion. Preferably, there is at least one T-slot 68a formed on a top surface 69 of the first portion 63, one or more T-slots 68b formed on a side surface 71 of the first portion perpendicular to the top surface, and at least one T-slot 68c formed on an inclined surface 73 of the second portion 65. Here, the upper surface 73 of the second portion 65 is formed at an angle with respect to the upper surface 69 of the first portion 63.

The single extrusion 64 further preferably includes one or more wire cavities 66 formed in the web portion 67 and extending along the length of the extrusion and access openings (not shown) intermittently spaced along the length of the extrusion for routing wires from the cavity 66 to the various electrical components mounted to the console 12. The single extrusion 64 is mounted to the steel frames 36 in a manner similar to the first and second rail extrusions 40 and 42 by means of conventional bolts 48 and T-slot fittings 50 that engage T-slots 68 formed in the single extrusion 64.

Returning to FIGS. 3 and 4, the various electrical components of the workstation 10 are mounted to the master rail system 30 in such a manner that they can be horizontally adjusted to suit any need. Additionally, the desktop 14 unit is also mounted to the master rail system 30 and is also provided with horizontal adjustment. In particular, each desktop unit 14 includes a flat work surface 15 and at least two desktop brackets 70 fixed to an underside thereof. The desktop bracket 70 includes a finger 72 formed on the inside edge thereof, which is sized to fit within and engage one of the T-slots 46 of the master rail system 30. Preferably, the desktop bracket 70 is mounted to an upper side T-slot 46c of

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the first rail extrusion 40 opposite the T-slot 46a for mounting the spoil board 44. The finger 72 of the desktop bracket 70 is shaped for insertion into the T-slot 46c and grips the inside surface of the T-slot. However, the finger 72 permits horizontal translation of the bracket 70 along the length of the T-slot 46c. Thus, the desktop 14 can be moved to any desirable location along the length of the rail system 30.

The console boxes 24 are also mounted on the rail system 30 with the ability to translate horizontally. The console box 24 is typically a wooden rectangular structure for mounting a computer or television monitor therein. However, the console box 24, of the present invention includes a right angle 74 fixed to a bottom surface thereof. One leg of the angle is fixed to the bottom of the console box while the other perpendicular leg forms a finger 75 which is seated in the top T-slot 46d of the second rail extrusion 42. With the finger 75 of the angle 74 seated within the T-slot 46d of the second rail extrusion 42, the console box 24 is prevented from moving forward or backward. However, the T-slot 46d permits the console box 24 to translate horizontally along the length of the T-slot. Preferably, the top of the steel frame 36 is inclined so that the upper surface 47 of the second rail extrusion 42 is disposed at a downward angle with respect to the upper surface 41 of the first rail extrusion 40 when both are mounted to the steel frame. Thus, when mounted to the second rail extrusion 42, the console box 24 will be oriented at a slight downward angle with respect to the desktop 14 for ergonomic purposes.

The upper T-slot 46e of the first rail extrusion 40 is used for mounting additional workstation components to the console 12. For example, FIG. 3 shows a flat screen monitor 22 attached to a vertical support stand 76, which in turn is mounted to the upper T-slot 46e of the first rail extrusion 40. The vertical support stand 76 includes a leg 78 having a T-shaped finger or fitting 70 fixed thereto, for example, by a bolt. The T-shaped fitting 80 of the support stand 76 engages the inner surfaces of the T-slot 46e to maintain the support stand 76 in a vertical orientation. However, the T-shaped fitting 80 is permitted to translate horizontally along the length of the first rail extrusion 40. Thus, the flat screen monitor 22 can be horizontally translated to any desired location on the console 12. While a flat screen monitor 22 is shown attached to the upper T-slot 46e, other types of equipment, such as script stands, microphone stands, lighting fixtures etc., can also be interchangeably attached to the rail system. To reduce frictional wear within the T-slots 46, the T-slots can be provided with Teflon™ caps 82.

It is to be understood that the attachment of the console box 24, the desktop 14 and the vertical support stand 76 to the single rail extrusion 64 shown in FIG. 5 is similar to that as shown and described with respect to the first and second rail extrusions 40 and 42. In particular, the longitudinal T-slots 68 of the single rail extrusion 64 allow for mounting and horizontal translation of all the components of the workstation 10.

The workstation 10 is shown in FIGS. 1-5 in an L-shaped configuration consisting of two end pieces and a corner piece. However, it is conceivable that the workstation 10 of the present invention can take any desired configuration, for example, a straight configuration, a rectangular configuration, etc. Moreover, two or more consoles 12 can be connected to form a larger work station. In this case, longer master rail systems 30 can be utilized or a bridge can be constructed between existing rail systems. Additionally, the

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console 12 of the present invention can be separated into individual workstations 100, each having its own master rail system, as shown in FIG. 6.

The workstation 100 shown in FIG. 6 can be adapted for individual use, such as with home computers. The workstation 100 generally includes two vertical frames or legs 102 an extruded rail 104 connecting the two legs, a desktop unit 106 supported on the rail 104 and a shelf unit 108 also supported on the rail. The desktop unit 106 provides a working surface 107 for the user and a surface for a computer keyboard, for example. The shelf unit 108 is spaced vertically higher than the desktop 106 for supporting one or more computer monitors at eye level to the user. The workstation 100 can further be provided with console boxes 110, which are also supported on the rail 104, for containing electrical components such as computer hard drives, or audio visual equipment.

Referring additionally to FIG. 7, an alternative embodiment for the master rail system is shown incorporated into the workstation 100 of FIG. 6. The alternative master rail embodiment consists of an extruded rail 104 having a circular cross-section and a plurality of T-slots 112 formed along the length of the rail and angularly spaced around its circumference. Again, the rail 104 is preferably made from a metallic material, such as aluminum.

The rail 104 fits within an aperture or opening 114 of each of the legs 102, as shown in FIG. 8. The opening 114 of the legs 102 includes at least one inwardly projecting T-shaped finger 116 which engages the T-slot 112 of the rail 104 to prevent rotational movement of the leg and the rail. The legs 102 are simply slid along the length of the rail 104 to their desired position.

Referring to FIG. 9, the desktop unit 106 includes a worksurface 107 and at least two desktop brackets 118 fixed to the bottom surface thereof. Each desktop bracket 118 has an opening 120 for receiving the rail 104. The opening 120 of the desktop bracket 118 similarly includes inwardly projecting fingers 122 which engage the T-slots 112 of the rail 104 to prevent rotational movement of the desktop 106 with respect to the rail. However, because the T-slots 112 of the rail 104 extend the entire length of the rail, the desktop 106 and the legs 102 can be adjusted horizontally along the rail as desired.

Referring now to FIG. 10, the shelf unit 108 similarly includes a flat surface 109 and at least two shelf brackets 124 fixed to a bottom surface thereof. The shelf bracket 124 also has an opening 126 formed therethrough for receiving the rail 104. The shelf bracket 124 also includes fingers 128 which project inwardly into the opening 126 for engaging the T-slots 112 of the rail 104 to prevent rotational movement of the shelf 108.

FIG. 11 is a side view of an assembled workstation 100 including legs 102 circular rail extrusion 104, desktop 106 and shelf 108. As mentioned above, one or more console boxes 110, for containing computer hardware for example, can additionally be mounted to the rail 104. The console box 110 would therefore include a console box bracket 130 having an opening with inwardly projecting fingers for engaging the rail 104. The circular rail extrusion 104 of the present invention allows the desktop 106, the shelf 108 and/or the console box 110 to be positioned in any desired angular orientation depending on which T-slots 112 are chosen. For example, the console box 110 is shown in FIG. 11 oriented at a slight downward angle with respect to the desktop 106.

It can be appreciated that additional workstation components can easily be mounted to the rail 104. For example, a

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flat screen monitor 22 can be attached to the rail 104 by a vertical support stand 132 similar to that shown in FIGS. 3 and 4. The support stand 132 would include a circular rail mounting bracket 134 having a finger 136 for engaging a T-slot of the rail 104 as shown in FIG. 12. It is further appreciated that the various components of the workstation 100 can be interchanged to suit the user's needs. For example, FIGS. 13 and 14 show the workstation 100 without the shelf 108. Here, a smaller shelf 138 having a mounting bracket 140 including a finger 142 is utilized. The smaller shelf 138 can be utilized if it is desired to support a computer monitor 18 or a flat screen monitor 22 at the same level as the desktop 106.

As mentioned above, because the T-slots 112 extend the entire length of the circular rail extrusion 104, all components mounted to the rail can be horizontally adjusted to suit the user's needs. For example, a computer monitor 18, a flat screen 22 and/or a console box 110 mounted to the rail 104 can be moved horizontally as indicated by the arrows 144 in FIGS. 15 and 16. Additionally, the legs 102 can be positioned along the rail 104 so that the ends of the rail extend beyond the legs for mounting such additional equipment as speakers 146 supported on speaker stands 148. As a result of the present invention, a totally adjustable and interchangeable workstation system is provided.

While there has been described what is presently believed to be the preferred embodiments of the invention, those skilled in the art will realize that various changes and modifications may be made to the invention without departing from the spirit of the invention and it is intended to claim all such changes and modifications as forward in the scope of the invention.

What is claimed is:

1. A multi-media workstation comprising:
 - at least two substantially vertical frames having an upper mounting surface thereon;
 - a rail mounted to said mounting surface of said vertical frames and connecting said frames, said rail including a first upper surface, a second upper surface, a lateral surface, a first longitudinal slot formed in at least one of said first upper surface, a lateral surface and a second longitudinal slot formed in said second upper surface, said second upper surface being formed at a downward angle with respect to said first upper surface;
 - a desktop unit having a finger engaged in said first longitudinal slot of said rail, wherein said desktop unit is able to be horizontally translated along a length of said rail; and
 - a console box for supporting a first piece of audiovisual equipment, said console box having a finger engaged in said second longitudinal slot of said rail, wherein said console box is able to be horizontally translated along a length of said rail.
2. A multi-media workstation as defined in claim 1, wherein said rail further comprises a web portion connecting said first and second surfaces.
3. A multi-media workstation as defined in claim 2, wherein said web portion includes at least one longitudinal cavity formed therein for containing electrical wiring for said workstation.
4. A multi-media workstation as defined in claim 3, wherein said web portion includes at least one grommet opening for accessing said electrical wiring contained within said cavity.

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5. A multi-media workstation as defined in claim 1, wherein said desktop unit comprises a work surface and at least two desktop brackets for supporting said work surface, said desktop brackets each including a finger engaged in said first longitudinal slot of said rail.

6. A multi-media workstation as defined in claim 1, wherein said first and second longitudinal slots of said rail are T-shaped.

7. A multi-media workstation as defined in claim 1, wherein said rail further includes a third longitudinal slot formed in one of said first upper surface and said lateral surface and wherein said workstation further comprises a support stand for supporting a second piece of workstation equipment, said support stand having a finger engaged in said third longitudinal slot of said rail wherein said support stand is able to be horizontally translated along a length of said rail.

8. A multi-media workstation as defined in claim 1, wherein said first upper surface is formed in a first portion of said rail extension and said second upper surface is formed in a second portion of said rail.

9. A multi-media workstation comprising:

at least two vertical frames having an upper mounting surface thereon;

a rail extrusion mounted to said mounting surface of said vertical frames and connecting said frames, said rail extrusion having as upper surface, a lateral surface and a longitudinal slot formed in each of said upper surface and said lateral surface;

a desktop unit having a finger engaged in said longitudinal slot of said lateral surface of said rail extrusion, wherein said desktop unit is able to be horizontally translated along a length of said rail extrusion; and

a vertical support stand for supporting a piece of audiovisual equipment, said vertical support stand having a finger engaged in said longitudinal slot of said upper surface of said rail extrusion, wherein said support stand is able to be horizontally translated along a length of said extrusion.

10. A multi-media workstation as defined in claim 9, wherein said rail extrusion further includes an inclined surface disposed at a downward angle with respect to said upper surface, said inclined surface having a longitudinal slot formed therein.

11. A multi-media workstation as defined in claim 10, further comprising a console box for supporting a second piece of audiovisual equipment, said console box having a finger engaged in said longitudinal slot of said inclined surface of said rail extrusion wherein said console box is able to be horizontally translated along a length of said rail extrusion.

12. A multi-media workstation as defined in claim 9, wherein said desktop unit comprises a work surface and at least two desktop brackets for supporting said work surface, said desktop brackets each including a finger engaged in said longitudinal slot of said lateral surface of said rail extrusion.

13. A multi-media workstation as defined in claim 9, wherein said vertical support stand is adapted to support a flat screen monitor.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,125,088 B2
APPLICATION NO. : 11/083758
DATED : October 24, 2006
INVENTOR(S) : Haberman

Page 1 of 1


It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 10, line 28, now reads "having as upper surface"
should read --having an upper surface--

Column 10, line 41, now reads "length of said extrusion"
should read --length of said rail
extrusion--

Signed and Sealed this

Sixth Day of March, 2007

A handwritten signature in black ink, reading "Jon W. Dudas", is written over a rectangular area with a light gray dotted background.

JON W. DUDAS
Director of the United States Patent and Trademark Office

EXHIBIT C



T B C C O N S O L E S

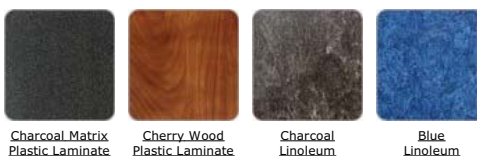
[Home](#) [What's New](#) [About TBC](#) [Products](#) [TBC Gallery](#) [Manufacturing](#) [Customer Service](#) [Contact Us](#)[Site Map](#) | [Help](#)**INTELLITRAC®**

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TBC Consoles' definitive technical furniture system sets new standards for modularity, ergonomics and high end aesthetics. Front and rear device tracks allow unlimited lateral positioning of critical monitors. Rack bay turrets may be easily upgraded or relocated allowing quick, user friendly modifications. A full range of articulating arms for distance, height and tilt control may be utilized for mounting flat panel monitors, speakers, phones and task lighting.



multiple track system • open "off-the-floor" design • integral cable management • removable vented abs panels • movable and interchangeable rack turrets

**Finishes + Downloads****Available Side Panels****Available Desktops**Charcoal Matrix
Plastic LaminateCherry Wood
Plastic LaminateCharcoal
LinoleumBlue
Linoleum[>> Click here to view the full line of available finishes.](#)**Product Downloads**[Features \(.pdf\)](#)[Dimensions \(.pdf\)](#)[Turrets \(.pdf\)](#)[Accessories \(.pdf\)](#)

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site by **graphic minds**

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EXHIBIT D

STANCHION TYPE **BASE STRUCTURE (T26)**
ALUMINUM EXTRUSION / STEEL COMBINATION
PROVIDES HIGH STRENGTH TO WEIGHT RATIO
AND CUSTOM DEPTH CONFIGURATIONS
UTILIZING STANDARD COMPONENTS.

MOVABLE + INTERCHANGEABLE **RACK TURRETS**
WITH HINGED AND REMOVABLE VENTED METAL LID
NO TOOLS REQUIRED.
FASTENING SECURITY BRACKETS AVAILABLE.

FRONT TRAC:
MAIN STRUCTURAL
T-SLOT EXTRUSION
FOR LCD POSTS,
COUNTERTOP ARMS
& ACCESSORIES

REAR TRAC:
CONTINUOUS T-SLOT
ALUMINUM EXTRUSION
FOR LCD ARMS
& RACK TURRETS

C-TOP ARMS
TRAC MOUNTED FOR
OPTIMAL LATERAL
PLACEMENT

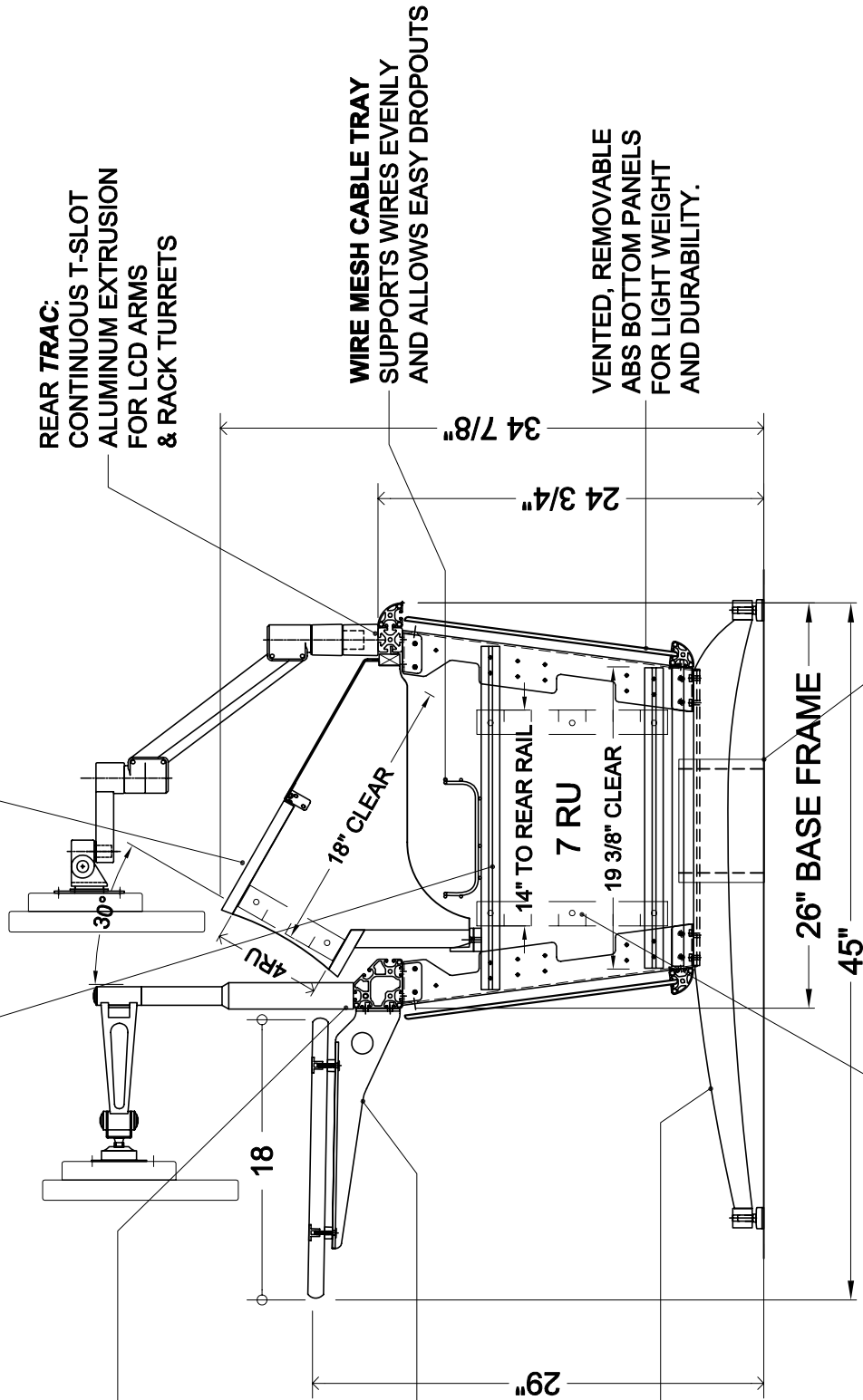
WIRE MESH CABLE TRAY
SUPPORTS WIRES EVENLY
AND ALLOWS EASY DROP-OUTS

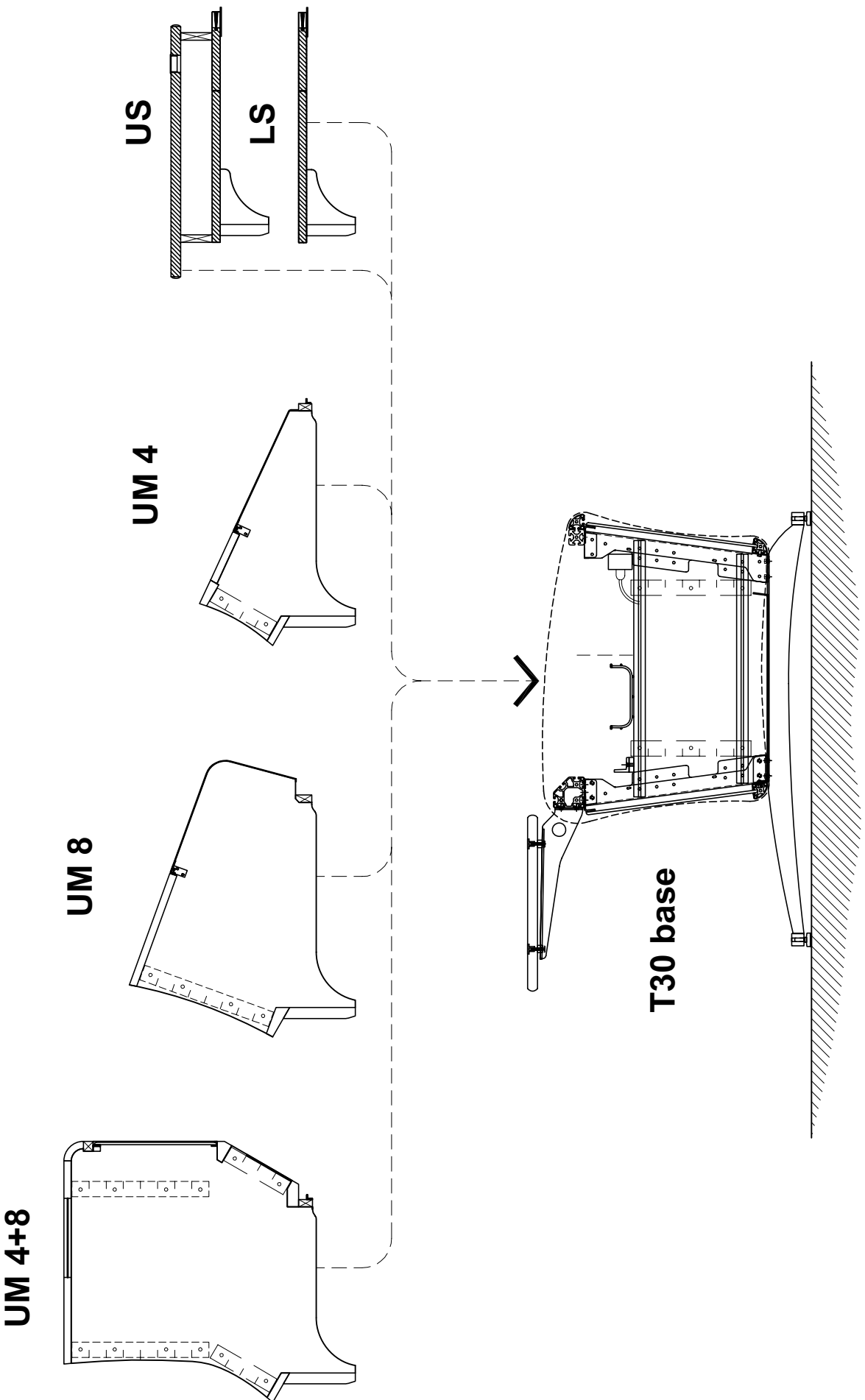
**FORMED STEEL
SUPPORT FOOT**
PLATINUM GREY
POWDERCOAT FINISH

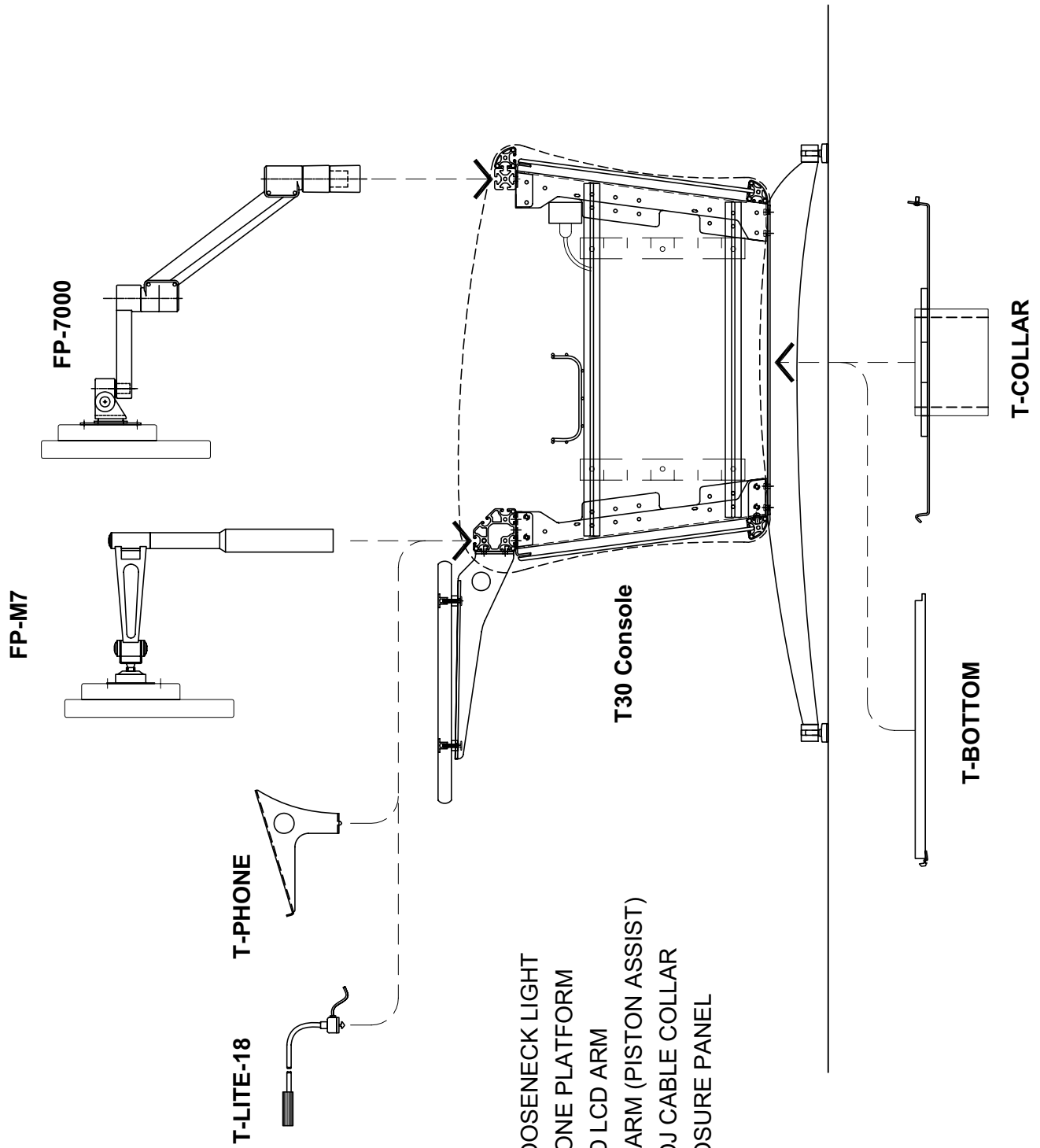
VENTED, REMOVABLE
ABS BOTTOM PANELS
FOR LIGHT WEIGHT
AND DURABILITY.

CABLE COLLAR
ADJUSTS TO MATCH
FLOOR CUTS.

FRONT AND REAR RACK RAIL
ADJUSTABLE SETBACK
TAPPED WITH 10-32 SREW HOLES



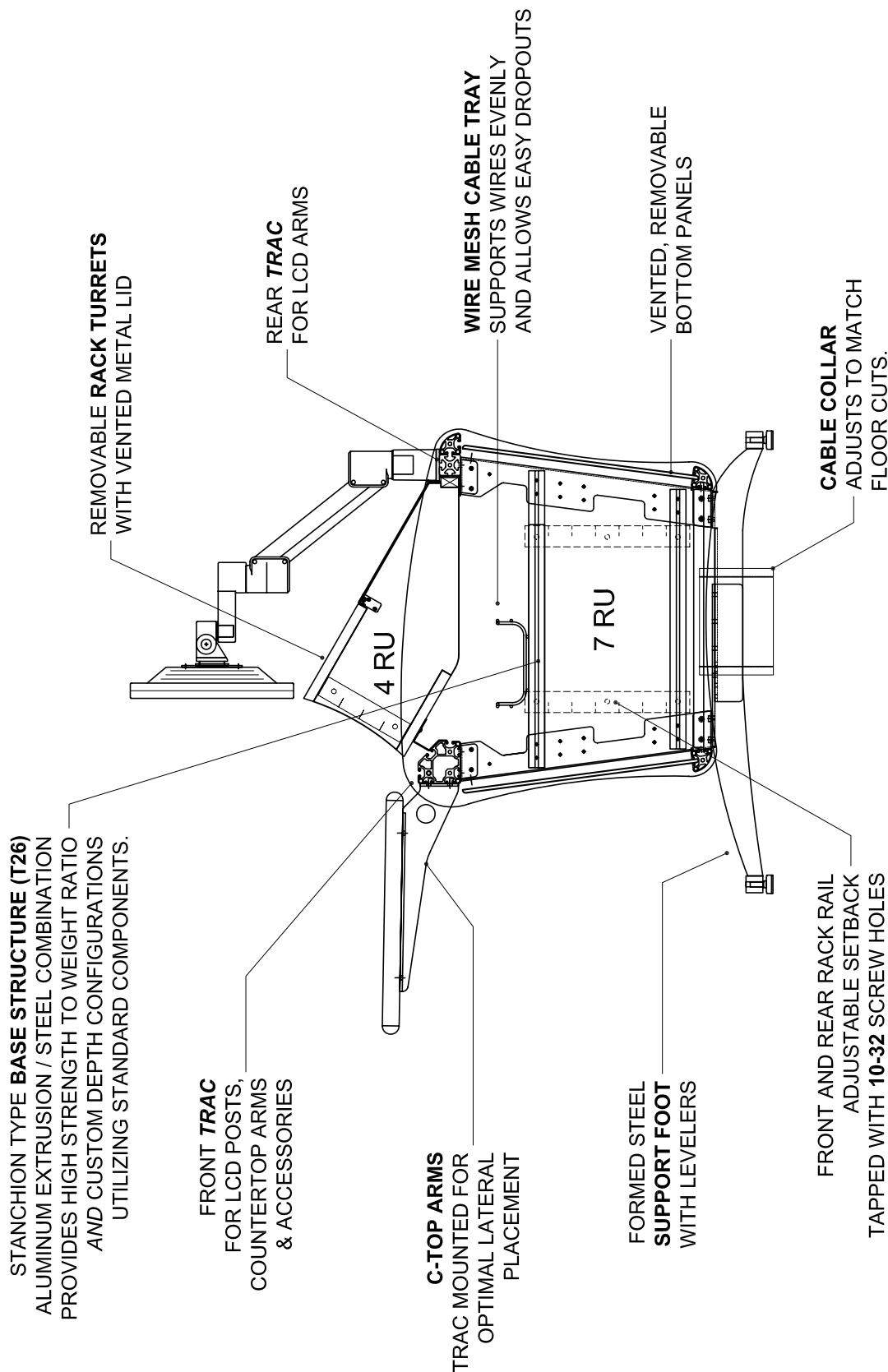




Legend:

T-LITE: TRAC MTD 18" GOOSENECK LIGHT
 T-PHONE: TRAC MTD PHONE PLATFORM
 FP-ROTATION: TRAC MTD LCD ARM
 FP-7000: TRAC MTD LCD ARM (PISTON ASSIST)
 T-COLLAR: TRAC MTD ADJ CABLE COLLAR
 T-BOTTOM: BOTTOM CLOSURE PANEL

EXHIBIT E



4RU RACK TURRET @ 30°

model: T26-4RU

C-depth / typical cross-section

intelliTrac console system